

Tidal Wave.—Grand Haven, Mich., 10th, the captain of steamer Flora reports encountering a tidal wave, about 5 a. m., when within 25 miles of west shore of Lake Michigan; the ridge of water was about 7 to 8 feet high; the rough sea reached the east shore of the Lake about 11 a. m.

TEMPERATURE OF WATER.

The *temperature of water*, as observed in rivers and harbors, with average depth when observations were taken, are given in table on chart No. II. Observations were interrupted at the following places on the dates indicated: on account of loss of thermometers, at Baltimore, 1st to 5th instant, at New London, 1st to 4th, at San Francisco, 1st to 23rd, and at Savannah, from the 19th to the 29th. The report from Baltimore, received too late for insertion in table, gives the highest temperature 76° , lowest 71° , average depth, 11 feet.

ATMOSPHERIC ELECTRICITY.

Thunder-storms.—1st, N. Y., Conn., Ill., Iowa, Me., Mass., Neb., N. H., N. J., Ohio, Vt., Col., N. M., Mo.; 2nd, Md., N. Y., Me., Mass., N. J., Ohio, Pa., Va., Conn.; 3rd, Ill., Mass., N. J., Ia., Iowa, Va.; 4th, Neb., N. Y., Mass., Mich., Pa., Vt., Wis., Wyo., Iowa, Va.; 5th, Md., Neb., N. Y., Dak., Ill., Ind., Me., Mass., Mich., N. H., N. J., Ohio, Pa., Vt., Col., Iowa, Mont.; 6th, Neb., Conn., Dak., Ill., Me., Md., Mass., N. H., N. J., Ohio, Pa., Va., R. I.; 7th, Kan., Neb., Fla., N. C., Dak.; 8th, Mich., Dak., Iowa, Mo., Neb., Pa., Kan., Ala., Fla., Tenn., Ga.; 9th, Ind., Ky., Kan., Minn., Neb., Ala., Dak., Ill., Ind., Iowa, Mo., N. Y., Ohio, Vt., Va., Wis., Tex., Fla.; 10th, Mass., Kan., Minn., Conn., Dak., Ill., Ind., Iowa, Md., Mich., Mc., Neb., N. J., N. Y., N. C., Ohio, Pa., Vt., Va., Wis., Ky., R. I.; 11th, Neb., N. Y., Va., Conn., Ga., Ill., Ind., Iowa, Md., Mass., Mo., N. H., N. J., Ohio, Pa., Tenn., Vt., Kan., Dak., Ala., Mich., Ky., N. C., Me.; 12th, Neb., N. Y., Ala., Conn., Dak., Ill., Iowa, Kan., Me., Md., Mo., N. J., Ohio, Pa., Vt., Nev., Tex., Fla., Tenn., N. C., Va., R. I., 13th, Dak., Ill., Iowa, Mo., Neb., N. H., N. Y., Va., Tex., Miss., Ind., Fla., Mass.; 14th, Ala., Conn., Dak., Ill., Ind., Iowa, Kan., Mich., Mo., Ohio, Wis., Col., Neb., Ind., Ty., Tex., Tenn.; 15th, Neb., N. Y., R. I., Va., Conn., Ga., Ill., Ind., Mass., Mich., N. H., N. J., N. C., Ohio, Pa., Tenn., Col., Tex., Ala., Wis.; 16th, Kan., Neb., Conn., Md., Mass., N. Y., Pa., Col., Dak., Tex., Miss., Fla., Ala., N. C., Va., R. I.; 17th, Fla., Kan., Mo., N. Y., Tex., La., Ind., Ga., S. C.; 18th, Ind., Ty., Neb., Dak., Mo., Wyo., Ind., Fla., Pa., N. J.; 19th, Ind., Ty., Kan., Neb., Dak., N. C., Va., Cal., Tex., Fla.; 20th, Ind., Ty., Ga., Iowa, Wis., Kan., Tex., Dak.; 21st, Ind., Ty., Dak., Mich., N. M.; 22nd, Mo., N. Y., Pa., Kan.; 23rd, Neb., Iowa, Dak.; 24th, Kan., Dak., Ill., Ind., Iowa, Mo., Neb., Va., Minn., Tenn., N. C.; 25th, Ala., Conn., Dak., Ill., Ind., Iowa, Mass., Mo., Neb., N. J., N. C., Ohio., Pa., Va., Fla., W. Va.; 26th, Kan., N. Y., Ill., Ind., Iowa., Mass., Mich., Mo., Neb., N. J., N. C., Ohio., Pa., Vt., Dak., Ala., Fla., N. C.; 27th, Kans., Conn., Dak., Ill., Ind., Iowa, Me., Md., Mass., Mich., Mo., Neb., N. Y., Ohio, Pa., Vt., Col., Ind., Ty., Wis.; 28th, Md., Ark., Conn., Ind., Mo., Mass., Mich., Me., Neb., N. J., N. Y., N. C., Ohio, Pa., Vt., Wis., Col., Tex.; 29th, Moont., Kan., Neb., N. Y., Va., Ala., Conn., Fla., Mass., N. J., Pa., Va., Col., Tex., Ind., N. C., Ga., R. I.; 30th, Fla., Mass., Neb., N. Y., Ind., Ty., Dak., Tex., N. J.

Auroras were observed as follows: on the 7th, in Iowa, Indiana, Canada and Maine; 8th and 9th, in northern portion of New England, Michigan and Dakota; 12th, summit of Pike's Peak and in Iowa; 13th, in New England, as far south as Connecticut; 15th, in Iowa; 16th, in Missouri, at Boonville and St. Louis, latter being most southerly during month; on the 17th a marked and general display, embracing New England, part of the Middle States, Lake region, Ohio and Upper Mississippi valleys; the most southerly reports are from Urbana, Ohio, and Chambersburg, Pa. This display, though general, was faint, white and straw being the prevailing colors. Its form was generally a dark segment, surmounted by a luminous arch, from which pale beams occasionally shot upward. It appeared earliest in the Northwest, at about 9 p. m., and was not seen in New York and New England until about 10 p. m.; its disappearance occurred at about midnight, being nearly simultaneous for all stations; 18th, in southern Michigan, New England, Ohio, at Fort Whipple, Va., which latter was the most southerly station reporting; 21st, in New Jersey; 23rd, in Maine; and on the 24th in Massachusetts.

Telegraphic Communication Interfered with by Atmospheric Electricity.—Pike's Peak, Col., 5th, interrupting telegraphic communication, 16th, 29th. Santa Fé, N. M., 1st, 21st. Bismarck and Deadwood, Dak., interfering with telegraph line. Mason, Tex., 9th, 12th. Eagle Pass and Laredo, Tex., 12th, prevented working of line. Graham, Tex., 9th, 19th, interrupting telegraphic communication. Pembina, Dak., 9th, 23rd, 30th, interrupting communication. Cape May, 12th, intense on wires. Springfield, Mass., 18th. Winnemucca, Nev., 16th.

OPTICAL PHENOMENA.

Solar Halos.—2nd, Ga.; 3rd, Iowa, Oregon, Minn., N. C., Tex.; 4th, Nev., Utah, Dak., Mo., Iowa, Minn., Ill., Neb.; 5th, Utah, Minn., Ohio, Ill.; 6th, Minn., Iowa, Me., Neb., N. Y.; 7th, Minn., Neb.; 8th, Iowa, Minn., N. Y., Conn., N. J.; 9th, Conn., Mass., Ill., Me., N. Y.; 10th, Utah, Iowa, Minn., Mass., N. Y.; 11th, Ohio, N. Y.; 12th, Tex., Iowa, Minn., Ohio, N. C.; 13th, Me., Ill., Ind., Ohio, Tex.; 14th, Nev., Dak., Minn., N. Y., Me., Conn., Pa.; 15th, Pa.; 16th, Cal.; 17th, Iowa; 18th, Utah, Iowa, N. C., Neb.; Oregon, 19th, Iowa; 20th, Iowa, Wis., Ill.; 21st, Dak., Ohio; 22nd, Iowa, Ga.; 23rd, Iowa, Ohio, Ky., Tenn., Ga., Fla., Cal.; 24th, Iowa, Fla., Kan.; 26th, Iowa, Mich.; 27th, N. Y., Mo.; 28th, Tex.; 30th, Kan., Mo.